Application/Control Number: 10/597,536

Art Unit: 3777



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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/597,536 Filing Date: July 28, 2006

Appellant(s): MURKOWSKI ET AL.

US Philips Corporation For Appellant

EXAMINER'S ANSWER

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This is in response to the appeal brief filed 2/4/2011 appealing from the Office action mailed 08/17/2010.

(1) Real Party in interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

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US 5,924,988	BURRIS ET AL.	07-1999
US 6,663,569	WILKINS ET AL.	12-2003
US 5,363,116	ALLEN ET AL.	11-1994

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
 obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1, 3-4 and 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over
 Burris et al. (US 5,924,988) in view of Wilkins et al. (US 6,663,569) and further in view of Allen (US 5,363,116).
- 3. Addressing claim 1, Burris discloses a flat panel display electrically coupled to the imaging electronics (see Figs. 1, 2 and 5, element 530); an articulating arm assembly to which the flat panel display is connected for adjusting the elevation and lateral position of the flat panel display with respect to the main body, the articulating arm assembly including a first arm

movably mounted to the main body and a second arm movably connected to the first arm and to the flat panel display (see Fig. 5, first arm is element 570, second arm is element 560, connected by hinges 550 and 580 and see column 6, lines 12-20; the arrow indicate the motion direction or travel direction of the part; the up-down arrow indicates the flat panel display move up or down or lower in line with the direction of travel). However, Burris does not explicitly disclose a main body housing imaging electronics and a control panel coupled to the imaging electronics; a wheeled cart on which is mounted the main body and the flat panel display with the control panel on the front, the wheeled cart being adapted so that the cart can travel in the front direction; the arm includes a 4-bar linkage containing a pneumatic piston inside the linkage; an inter-arm locking mechanism, located on the first and second arms which is adapted to lock the two arms together in a stowed position when the two arms are lowered in line with the direction of travel. Wilkins discloses a main body housing imaging electronics and a control panel coupled to the imaging electronics (see Fig. 1, elements 18 is the control panel, element 12 is the cart that house the imaging electronics that couple to the control panel); a wheeled cart on which is mounted the main body and the flat panel display with the control panel on the front, the wheeled cart being adapted so that the cart can travel in the front direction (see Fig. 1, element 12); a 4-bar linkage containing a pneumatic piston inside the linkage (see Figs. 1-2, 5a, and col. 2, lines 13-col, lines 25, element 60 is the piston inside the 4-bar linkage, element 40 is the 4-bar linkage). Allen discloses an inter-arm locking mechanism, located on the first and second arms which is adapted to lock the two arms together in a stowed position when the two arms are lowered in line with the direction of travel (see Fig. 2 and 3, the two arms are lower in line with the direction of travel and lock by the screw on in stow position). It would have been obvious to one of ordinary skill in

the art at the time of the invention to modify Burris's system to include a main body housing imaging electronics and a control panel coupled to the imaging electronics; a wheeled cart on which is mounted the main body and the flat panel display with the control panel on the front, the wheeled cart being adapted so that the cart can travel in the front direction; a 4-bar linkage containing a pneumatic piston inside the linkage; an inter-arm locking mechanism, located on the first and second arms which is adapted to lock the two arms together in a stowed position when the two arms are lowered in line with the direction of travel as taught by Wilkins and Allen because a housing imaging electronics and a control panel couple imaging electronics on a wheeled cart allows the imaging system to be mobile; a 4-bar linkage containing a pneumatic piston inside the linkage for balancing the mass of the display; and the interlocking mechanism locks and folds the two arms together for convenient transportation of the support assembly.

4. Addressing claims 3-4 and 6, Burris discloses first and second arms connected together, connected to the main body and connected to the display panel (see Fig. 5, first arm is element 570, second arm is element 560, connected by hinges 550 and 580 and see column 6, lines 12-20). However, he does not disclose the second arm includes 4-bar linkage with pivot axes at both ends. Wilkins discloses the second arm includes a 4-bar linkage with pivot axes at both ends (see Fig. 2-3, col. 2, lines 13-37, elements 34 and 32 are the 4-bar linkage, elements A, B, A', B', A'' and B'' are pivot axes). Allen discloses a user-operated lock release to cause the locking of the two arms to be released (see Fig. 2-3, in order to release the two arms the operator takes off the locking screw).

- 5. Addressing claims 7-9, Burris discloses the articulating arm assembly further includes a first vertical pivot axis located at an end of the first arm which is movably mounted to the first body and a second vertical pivot axis located at an end of the first arm which is connected to the second arm (see Fig. 5, elements 560 and 570); the articulating arm assembly further includes a third vertical pivot axis located at an end of the second arm which is connected to the flat panel display, and a horizontal pivot axis located at the end of the second arm which is connected to the flat panel display (see Fig. 4 and 5); the arc of travel of the first arm about the first vertical pivot axis is constrained to be less than 360°, and wherein the arc of travel of the second arm about the second vertical axis is constrained to be less than 360°; (see Fig. 5, elements 560 and 570). It is inherent that the first and second arm can not travel 360° or more because other components of the system are in the way. The first and second arms would break if travel 360° or more
- 6. Addressing claims 10-12, Burris does not disclose an adjustment mechanism for the piston to provide a balancing counter-weight force. However, Wilkins discloses an adjustment mechanism for the piston to provide a balancing counter-weight force (see Figs. 1-2, 5a, and col. 2, lines 13-col, lines 25, element 60 is the piston inside the 4-bar linkage, element 40 is the 4-bar linkage).
- Addressing claim 13, Burris discloses wherein the first arm exhibits a fixed upward
 inclination from an end which is connected to the main body to a second end which is elevated
 above the connection to the main body (see Fig. 5, element 570 is the first arm that exhibits a

fixed upward inclination from an end which is connected to the main body to a second end which is elevated above the connection to the main body). However, Burris does not disclose a second arm that includes a 4-bar linkage. Wilkins discloses a second arm that includes a 4-bar linkage for counter balance the weight (see Fig. 2-3, elements 32 and 34).

8. Addressing claim 14, Burris does not disclose wherein the 4-bar linkage includes first and second upper bars coupled between the first and third pivot axes and third and fourth lower bars coupled between the second and fourth pivot axes, wherein the first bar is rigidly connected to the second bar and the third bar is rigidly connected to the fourth bar. However, Wilkins discloses wherein the 4-bar linkage includes first and second upper bars coupled between the first and third pivot axes and third and fourth lower bars coupled between the second and fourth pivot axes, wherein the first bar is rigidly connected to the second bar and the third bar is rigidly connected to the fourth bar (see Fig. 2-3, col. 2, lines 13-37, elements A, B, A', B', A'' and B'' are pivot axes).

(10) Response to Argument

Appellants argue at page 7 of the brief, regarding claim 1 that Burris does not disclose locking function/mechanism. Appellants' argument is not persuasive because Allen discloses an inter-arm locking mechanism, located on the first and second arms which is adapted to lock the two arms together in a stowed position (see Figs. 2 and 3, the needle pin lock the two arm together in a stow position).

Appellants argue at pages 7 and 8 of the brief, regarding claim 1 that Burris does not disclose a stow position. Appellants' argument is not persuasive because Allen discloses stow position (see Figs. 2-3, stow position is rest position, Allen discloses two arms or legs in rest/stow position and being locked by a pin).

Appellants argue at page 8 of the brief, regarding claim 1 that Wilkins teaches away from the combination with Burris because Wilkins's 4-bar linkage and piston do not lift the light flat panel display; instead it lifts the heavy control panel. Appellants' argument is not persuasive because examiner only relies on Wilkins to teach 4-bar linkage and piston. Further, 4-bar linkage and piston that lift heavy panel is capable of lifting a lighter flat panel display. Examiner does not rely on Wilkins to teach mechanical device for lifting. The lifting of flat panel display is disclosed by Burris (see Fig. 5, elements 560 and 570).

Appellants argue at page 9 of the brief, regarding claim 1, that it would not have been obvious to one of ordinary skill in the art at the time of the invention to modify Wilkins with Allen because Allen is not in the same field of endeavor and Allen's structure is complex and have different functionality. Appellants' argument is not persuasive because examiner only relies on Allen to teach stow position and locking mechanism. Allen discloses arms or legs that support a device. Allen discloses a supporting structure that in stows position and being lock by locking mechanism when not in use and this is what examiner relies on from Allen reference. The

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functionality is the same. The function is to hold up or support a device when in use and in stow position when not in use.

Appellants argue at page 10 of the brief, regarding claim 1 that Allen and combination of references do not disclose direction of travel. Appellants' argument is not persuasive because Allen discloses direction of travel (see Fig. 3, the arrow at the bottom; when the legs are open or close that is direction of travel). Further, Burris discloses lowered in line with the direction of travel (see Fig. 5, the up-down arrow, this arrow shows that the flat panel display is capable of moving up or down using the two arms; also see appellants' brief bottom page 7 and top page 8; appellants admit the arrow indicates motional range of different part).

Appellants argue at page 11 of the brief, regarding claim 1 that Wilkins's piston provides no counterbalance for the weight of the control panel. Appellants' argument is not persuasive because Wilkins's piston provides counterbalance for the weight of the control panel (see col. 3, lines 9-25; when the piston's valve is close the piston hold up the control panel at its current elevation; this is providing counterbalance weight to the control panel; without providing counterbalance weight the control panel would not be at its current elevation; it would fall down; appellants' claim does not exclude the use of closing the valve of the piston).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/HIEN NGUYEN/

Examiner, Art Unit 3777

Conferees:

/Tse Chen/ Supervisory Patent Examiner, Art Unit 3777

/Sue Lao/ Primary Examiner